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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 32460-2015

**Fire emergency rescue equipments - General technical
specification for forcible entry tools**

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Foreword

This standard Chapter 5, Chapter 7 and

8.1 are mandatory, the rest are recommended. This standard was drafted in accordance with rules GB/T 1.1-2009 given. The standard proposed by the People's Republic of China Ministry of Public Security. This standard by the National Fire Protection Standardization Technical Committee (SAC/TC113). This standard was drafted. Ministry of Public Security Shanghai Fire Research Institute. The main drafters. Mao Yiping, Teng Wei Li, Yang hours, Jin Wei, Gu Wenjie, Wang Yi. Emergency rescue equipment General technical rescue equipment

1 Scope

GB 32460-2015 is the Chinese national standard on fire emergency rescue equipments - general technical specification for forcible entry tools, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 31 December 2015 by the General Administration

of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 July 2016.

Classification: ICS 13.220.10, CCS C84. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the fire emergency rescue equipment rescue equipment in terminology and definitions, classification and models, technical requirements, test methods, inspection Rules and signs, packaging, transportation and storage. This standard is applicable to saws used for fire fighting and rescue work in rescue tool rescue maneuver.

2 Normative references

The following documents for the application of this document is essential. For dated references, only applies to the version dated paper Pieces. For undated references, the latest edition (including any amendments) applies to this document.

GB 1499.2 steel reinforced concrete - Part 2. Hot rolled ribbed bars

GB/T 5860 and hydraulic quick couplings size requirements

GB/T 8606 Hydraulic quick coupling screw connection size and technical requirements

GB 11121 gasoline engine oil

GB 50010 Design of Concrete Structures

JB/T 5135.1 Small Gasoline Engine Part 1. Technical requirements

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Rescue equipment forcible entry tool By a small gasoline engine (or a hydraulic pressure source), transmission (or pipeline), the blade (or blades), the handle, guard and other components, can be of metal, wood Cutting rescue operations, collectively materials, such as concrete saws and portable power tool operated by a single person firefighters.

3.2 Toothless saw abrasivesaw Actuator blade formed by bonding fine inorganic particles, the rescue equipment cutting blade speed rotation.

3.3 Chainsaw chainsaw By the chain saw blade actuator having a metal composition serrations, cut through a chain of rescue equipment moving at high speed.

3.4 Wheel counter-cutting saw double anisotropic cutting saw Blade actuator by two metal discs having serrated composition, the cutting blade rotating at high speed to the rescue by two reverse Machinery.

3.5 Ring Saw ringsaw A blade actuator having a serrated annular sheet-metal composition, the rescue equipment cutting blade speed rotation.

3.6 Rated cutting depth ratedcuttingdepth Rescue equipment at rated operating conditions, the distance that can be cut deepest.

3.7 Cutting speed cuttingspeed Rescue equipment under test conditions, the cutting area per unit time.

3.8 Curb weight glossweight Rescue equipment fuel oil tank by filling the maximum rated amount, type or a hydraulic rescue equipment body and the pipeline filled with hydraulic oil, and install On the total mass of the saw blade.

4.1 Classification and designation

4.1.1 rescue its drive machinery can be divided into.

--- fuel type code for R & It;

--- hydraulic type, code-named Y.

4.1.2 rescue equipment can be divided according to their kinds.

--- chain saws, code-named L;

--- toothless saw, W is code-named;

--- to different wheel dicing saw, code is S;

--- circular saw, code-named H.

4.2 Model Model methodology rescue equipment shall meet the following requirements. PJ Rescue equipment Drive form (see 4.1.1) The type of code (see 4.1.2) Nominal cutting depth, in millimeters (mm) The rescue type (J represents a metal, H represents a concrete, M is wood) Example 1. Nominal cutting depth of 150mm can be cut steel and concrete hydraulic type toothless saw expressed as PJYW/150-JH. Example 2. Nominal cutting depth of 250mm can be cut wood fuel type chain saw expressed as PJRL/250-M.

5 Technical requirements

5.1 Appearance Rescue equipment should be clearly marked, correct content, and safety warning mark, the outer surface should be smooth, burr-free, and processing defects, metal Surface should be protected against corrosion.

5.2 structural requirements

5.2.1 The rescue equipment should be reasonable structure, easy to operate and flexible. Hydraulic pipeline should be arranged neatly, firmly installed.

5.2.2 Structure manage rescue equipment should be designed, with one hand holding the

front end of the handle should be a weight center of gravity of the machine; manual grasping the front end Spacing the rear end of the handle and the handle switch should be 350mm ~ 400mm.

5.2.3 rescue equipment with gasoline and the gasoline engine oil should meet the requirements JB T GB 11121/5135.1 respectively.

5.3 Curb weight Portable rescue equipment curb weight should be less than 25kg, cart-based rescue equipment curb weight should be less than 100kg.

5.4 Performance rescue The rescue equipment saw blade scope thereof, should a cutting metal, wood and concrete features, should not be less than the cutting depth 100mm. Cutting speed should meet the requirements in Table 1. Table 1 in units of square centimeters per minute Cutting speed rescue equipment types Chain saws Steel - Wood ≥ 500 Concrete ≥ 100 Toothless saw Reinforced $\geq$

10 Wood ≥ 100 Concrete ≥ 100 Wheel counter-cutting saws Reinforced ≥ 20 wood- Concrete - Trepan Steel - wood- Concrete ≥ 100

Note. "-" indicates not have this feature.

5.5 Requirements cold start Rescue equipment should have good low temperature start, at $-25^{\circ}\text{C} \sim -20^{\circ}\text{C}$ environment of low temperature start-up time should be less than 30s.

5.6 interchangeability requirements

5.6.1 toothless saw blade should be interchangeable, which the saw blade shaft hole size should $\phi 20.5\text{mm}$.

5.6.2 Type hydraulic rescue equipment should interchangeable pipeline, which pipeline quick change the shape and size of the joint should conform to GB/T 5860 in Series A and GB/T 8606 requirements.

5.7 Security Requirements

5.7.1 Noise The noise load maximum speed rescue equipment should be less than 105dB.

5.7.2 vent An exhaust vent rescue equipment should not be injected into the jet direction of the operator.

5.7.3 shield Rescue equipment should be provided blade guard, it should have a shield to prevent debris during normal operation splashes directly to the body work and personal can. Protective cover shall be marked with a symbol blade rotation direction.

5.8 Continuous performance Fuel filling a nominal amount of fuel

5.8.1 type of rescue equipment, should be able to ensure continuous uptime of not less than 20min.